

PATENT ABSTRACTS OF JAPAN

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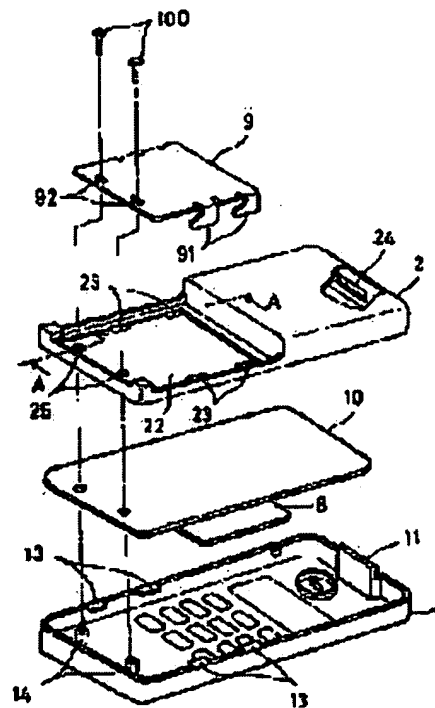
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(54) PORTABLE RADIO EQUIPMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To secure the degree of freedom on the design of a dial key by installing hooks by making them face the centers of both sides in a plate inserted into the battery storage part of a rear cover and fitting the hooks so that they can be attached/detached to/from pawl parts formed on the inner side of a front case.

SOLUTION: Plural hooks 91 which are positioned on both sides and extend in the longitudinal direction of a rear cover 2 are formed in a metallic plate 9 inserted in the battery storage part 22 of the rear cover 2. Plural pawl parts 13 which are positioned on the inner side of the centers of both sides and correspond to the hooks 91 of the plate 9 are formed in a front case 1. A key sheet 8 and a circuit board 10 are mounted on the front case 1 and one end of the rear cover 2 can be engaged with the front case 1 by the fitting means 11 and 24 of fitting pawls. A part on the other end of the rear cover 2 is screwed to the screw bosses 14 of the front case 1 by screwing and they are fastened.



LEGAL STATUS

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CLAIMS

[Claim(s)]

[Claim 1] The field radio characterized by making it engaged possible [engaging and releasing to the claw part which countered in said center of both sides at least, prepared the hook in the plate which inserts the other end side of a rear cover, and the center of both sides in the battery holder of a rear cover in the field radio of the prefabricated frame structure fixed to a front case while arranging a key seat and the circuit board inside a front case and stopping the end of a rear cover in a front case, and formed this hook inside the front case].

[Claim 2] Said hook is a field radio according to claim 1 characterized by passing along the side of said key seat and the circuit board, and engaging with said claw part via the through tube formed in the both sides of said rear cover.

[Claim 3] Said plate is claim 1 characterized by being attached firmly to said front case by the other end side of said rear cover with said rear cover, or a field radio given in 2.

[Claim 4] Said plate is claim 1 characterized by being attached firmly to said rear cover and attaching said rear cover firmly to said front case by the other end side, or a field radio given in 2.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] Especially this invention relates to the attachment structure of the rear case over a front case mainly about prefabricated frame structures of a field radio, such as a portable telephone.

[0002]

[Description of the Prior Art] As a prefabricated frame structure of a field radio represented by the portable telephone of drawing 1, conventionally As shown in drawing 5, a key seat 8 and the circuit board 10 are mounted in the front case 1. The end side (head) of a rear cover 2 with the means 11 and 24, such as a fitting pawl The structure which it engaged with the front case 1, and four by the side of the both-sides center section of the longitudinal direction and the other end (lower part) were ****ed, and was concluded in the front case 1 by the stop (means, such as a screw 100 and through tubes 25 and 27) is common. In addition, said through tube is prepared in the battery holder 21 for a cell 3 prepared in the rear cover 2.

[0003] Using a screw 100, ****, screw in the stop bosses 14 and 15, and conventionally [to conclude] for which the rear cover 2 was formed in the front case 1 however, structure Since the both-sides center section of the longitudinal direction ****s, a stop location is applied to the configuration range of the dial carbon button 4 and a limit is brought to the array of the dial carbon button 4 It needed to be made said dial array and configuration where ****ed and the stop boss 15 was avoided, and became an exterior and an unnatural form, and operability had become bad carbon button spacing. Moreover, although that arrangement needed to be taken into consideration so that it might prepare and **** in the front case 1 and the stop boss 15 might be escaped as much as possible from a key seat 8 or the circuit board 10, at this time, the mounting field of the circuit board 10 of an electrical part decreased, and it had become the failure of a miniaturization.

[0004]

[Problem(s) to be Solved by the Invention] This invention tends to offer the field radio of the prefabricated frame structure which can combine a rear cover with a front case out of the arrangement field of the dial carbon button of a front case using the plate inserted in the cell hold section of a rear cover, in order to solve the trouble of said structure.

[0005]

[Means for Solving the Problem] For this reason, while arranging a key seat and the circuit board inside a front case and stopping the end of a rear cover in a front case in this invention In the field radio of the prefabricated frame structure which fixes the other end side of a rear cover, and the center of both sides to a front case It is characterized by making the plate inserted in the battery holder of a rear cover engage with the claw part which countered in said center of both sides at least, prepared the hook, and formed this hook inside the front case possible [engaging and releasing].

[0006] therefore, the thing for which the arrangement field of a dial carbon button is invaded since said hook is stopped by the claw part in the center in the both sides of a front case -- since there are nothings and the array of a dial carbon button is not restricted, structure with it is acquired. [good an exterior

form and sufficient / operability] Moreover, since there is no spatial effect also to the circuit board within a front case, it does not become the hindrance of mounting of an electrical part.

[0007]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is concretely explained with reference to drawing 1 thru/or drawing 4 . With the gestalt of operation shown in drawing 1 thru/or drawing 3 , the field radio forms two or more hooks 91 which are located in the both sides at the metal plate 9 inserted in the battery holder 22 of a rear cover 2, and are prolonged at the longitudinal direction of a rear cover 2, is located in the front case 1 inside the center of both sides, and two or more claw parts 13 corresponding to the hook section 91 of said plate 9 are formed.

[0008] As usual, in addition, in the front case 1 A key seat 8 and the circuit board 10 are mounted, and the end side (head) of a rear cover 2 is engaged with the front case 1 with the means 11 and 24, such as a fitting pawl. With the gestalt of this operation Two by the side of the other end (lower part) of a rear cover 2 are ****ed, and the structure which the front case 1 ****ed, screwed in the stop boss 14, and was concluded by the stop (means, such as a screw 100 and through tubes 92 and 25) is adopted. In addition, a through tube 92 is formed in a plate 9, and the through tube 24 is formed in the rear cover 2.

[0009] With the gestalt of this operation, via the through tube 23 formed in the both sides of a rear cover 2, especially the hook 91 passes along the side of a key seat 8 and the circuit board 10, and is engaging with the claw part 13.

[0010] With such a configuration, since it is located in the arrangement field of the dial carbon button 4 of the front case 1, ****, it becomes unnecessary to prepare a stop boss and the screw-thread conclusion section in the both-sides center section of the longitudinal direction of a front case can be deleted, the design design-degree of freedom of the dial carbon button 4 can be extended, and the component-side product on the circuit board 10 can be enlarged.

[0011] Moreover, as shown in drawing 4 , the format which formed the through tube 93 which it ****ed and was independently prepared not using the screw 100 for stops in the rear cover 2 on the screw 101 and which it ****s and is screwed in a hole 26 may be adopted as immobilization of the plate 9 to a battery holder 22. In this case, on a screw 100, through the through tube 25 formed in that other end, the front case 1 ****s, and a rear cover 2 is screwed in the stop boss 14, and is concluded.

[0012] In addition, in the gestalt of above-mentioned operation, signs 5, 6, and 7 are the displays, loudspeakers, and microphones which were formed in the front case 1.

[0013]

[Effect of the Invention] It came to have explained this invention in full detail above, and a field radio is ****ed in the both-sides center section of the longitudinal direction, does not need to prepare the conclusion section, can secure the design design-degree of freedom of the dial carbon button 4, and can enlarge the component-side product of the circuit board. Moreover, productivity can also improve by reducing the number of screw bundle activities.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the appearance perspective view of the field radio concerning this invention.

[Drawing 2] It is the decomposition perspective view showing the gestalt of operation of this invention.

[Drawing 3] Similarly, it is the sectional view of an important section which met the A-A line of drawing 2 .

[Drawing 4] It is the decomposition perspective view showing the gestalt of other operations of this invention.

[Drawing 5] It is the decomposition perspective view showing the conventional structure.

[Description of Notations]

- 1 Front Case
- 2 Rear Cover
- 3 Cell
- 4 Dial Carbon Button
- 5 Display
- 6 Loudspeaker
- 7 Microphone
- 8 Key Seat
- 9 Plate
- 10 Circuit Board
- 11 Engagement Means
- 13 Claw Part
- 14 15 It ****s and he is a stop boss.
- 21 22 Battery holder
- 23 Through Tube
- 24 Stop Means
- 25 Through Tube
- 26 Screw-Thread Hole
- 27 Through Tube
- 91 Hook
- 92 Through Tube
- 93 Through Tube
- 100 101 Screw

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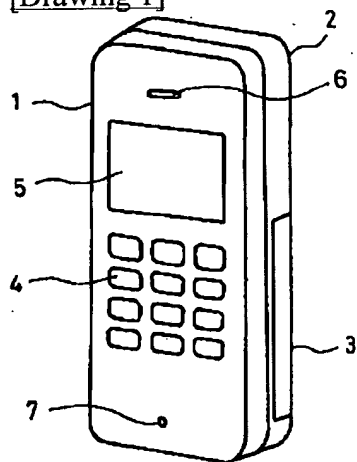
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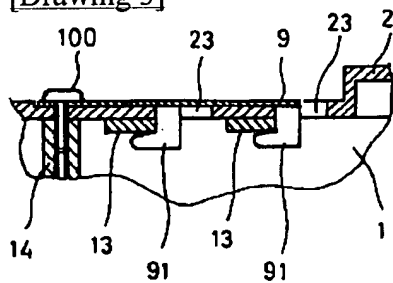
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DRAWINGS

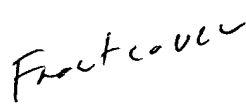
[Drawing 1]



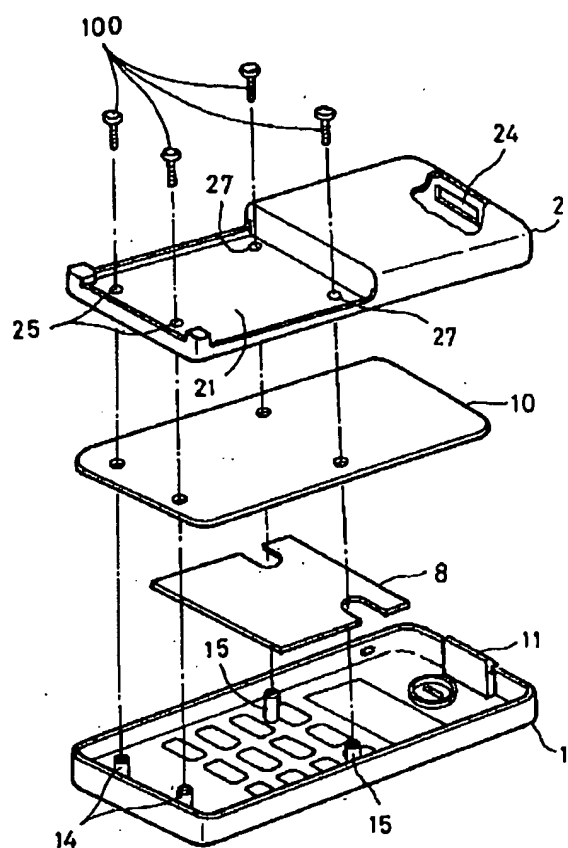
[Drawing 3]



[Drawing 2]

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